

Patent Claims

1. Method for producing an electronic component, particularly a thin QFP, in which
- a standardized lead frame (20) with a predetermined number of leads (3) for a set of
integrated circuits (1,11) of different sizes is produced, the standardized lead frame (2)

5 being constructed with a central island (4, 14, 24) of a prescribed maximum size for
accommodating one of the integrated circuits (1, 11) of this set;

- the island (4, 14, 24) is reduced in correspondence to the base surface of the
respective integrated circuit (1, 11);

- the integrated circuit (1, 11) is fastened on the island (4, 14, 24); and

10 - the lead frame (2) with the integrated circuit (1, 11) fastened on the island (4, 14, 24)
is embedded in a casting or molding material, with the unit that is formed by the island
and the integrated circuit being centered relative to height.

2. Method as claimed in claim 1, characterized in that the lead frame with the island (4,
15 14, 24) therein is stamped.

3. Method as claimed in one of the preceding claims, characterized in that the
integrated circuit (1, 11) is glued onto the island (4, 14, 24).

20 4. Method as claimed in one of the preceding claims, characterized in that the fastening
of the integrated circuit (1, 11) on the island (4, 14, 24) is checked with the aid of glue
that escapes.

25 5. Electronic component with an integrated circuit (1, 11) and a standardized housing
(6) consisting of casting or molding material into which the integrated circuit (1, 11) is
embedded, and with a lead frame (2) comprising a central island (4, 14, 24) for
accommodating the integrated circuit, whereby the island is so constructed as to prevent
housing deformation, characterized in that the island (4, 14, 24) is constructed
substantially flush with the integrated circuit (1, 11), and that the thickness of the
30 housing region (7) above the integrated circuit (1, 11) equals the thickness of the
housing region (8) below the island (4, 14, 24).

6. Electronic component as claimed in claim 5, characterized in that the island (4, 14) is somewhat larger than the chip (1, 11).

5 7. Electronic component as claimed in one of the claims 5 or 6, characterized in that the integrated circuit (1, 11) is glued onto the island (4, 14), and the glue that escapes forms a fillet (5) at the integrated circuit (1, 11).

10 8. Electronic component as claimed in one of the claims 5 to 7, characterized in that the ratio of the surface area of the base of the integrated circuit to the surface area of the island equals 0.9:1.

9. Electronic component as claimed in one of the claims 5 to 8, characterized in that the island (4, 14, 24) is constructed as a contiguous unstructured surface.

15 10. Electronic component as claimed in one of the claims 5 to 9, characterized in that the leads (3) are led as far as the island (4, 14, 24).

20 11. Electronic component as claimed in one of the claims 5 to 10, characterized in that the leads (3) are centered relative to the height of the housing (6), and the island (4, 14, 24) is sunk somewhat relative to the leads (3).